

STATEMENT OF BASIS (AI No. 73864)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0123765 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Baudin's Sausage Kitchen
P.O. Box 9
Breaux Bridge, LA 70517

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Molly McKean

DATE PREPARED: April 11, 2008

1. PERMIT STATUS**A. Reason For Permit Action:**

First time issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permits - LPDES permit effective date: N/A
LPDES permit expiration date: N/A

D. Date Application Received: December 25, 2007; additional information received February 18, 2008

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY -** sausage processing facility

This is a sausage packaging facility discharging 900 gpd of sanitary wastewater and equipment/floor washwater. The wastewater is treated by a package treatment plant and oxidation pond prior to discharge. The facility has 20 employees and produces an average of 5500 lbs/day of sausage.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II, BPJ points to 0 based on facility size
3. Wastewater Type: II
4. SIC code: 2013, 5421

C. LOCATION - 4636 Bridge St. Hwy, St. Martinville, St. Martin Parish
Latitude 30° 14' 16", Longitude 91° 51' 28"

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3. OUTFALL INFORMATION

Outfall 001

Discharge Type: sausage processing wastewater (includes building and equipment
washdown) and sanitary wastewater
Treatment: package treatment plant and oxidation pond
Location: at the point of discharge from the oxidation pond, prior to mixing with any
other waters
Flow: 900 GPD
Discharge Route: Bayou Teche via local drainage

4. RECEIVING WATERS

STREAM - Bayou Teche via local drainage

BASIN AND SEGMENT - Vermilion-Teche Basin, Segment 060301

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
d. drinking water supply

5. TMDL STATUS

Subsegment 060301, Bayou Teche - Headwaters at Bayou Courtableau to Keystone Locks and Dam, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060301 was previously listed as impaired for suspended solids/turbidity/siltation, nutrients (nitrate + nitrite as N), organic enrichment/low DO, pathogen indicators, carbofuran, and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000). Assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for Total Phosphorus will not be placed in this permit.

The following TMDL's have been established for subsegment 060301:

Bayou Teche Oxygen Demand (final February 25, 2000) - Organic enrichment/low DO and nutrients were addressed by the Bayou Teche Watershed TMDL for Dissolved Oxygen

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Including WLAS for Twenty-two Facilities and Addressing Nutrients Subsegments 060205, 060301, 060401, and 060501. This facility was not included in the TMDL Models. Thus, a WLA was not developed for this facility. LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a BOD₅ limitation. Compliance with the BOD₅ limitation as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the permit, in addition to LDEQ's ambient water quality monitoring program, will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Other Conditions of the final permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

Bayou Teche Fecal Coliform (final April 5, 2001) - As per the Bayou Teche Fecal Coliform TMDL, "there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." This permit includes standard fecal Coliform limits for this industry type.

TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed (final May 2, 2002) As per the TMDL, "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, with respect to the TMDL, LDEQ has determined that the standard TSS limits for sanitary wastewater totaling less than 5000 gpd shall be protective.

TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche River Basins (final March 21, 2002) - No allocation was given to point source discharges in the Vermilion-Teche River Basin. According to the TMDL, there is only one point source in the Vermilion-Teche (FMC Corp. LA0064360) but it does not discharge Carbofuran. In addition, this facility has no potential to discharge Carbofuran. Therefore, requirements for Carbofuran are not required in this permit.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

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7. COMPLIANCE HISTORY/COMMENTS

- A. OEC – There are no open or appealed enforcement actions on file as of April 25, 2008. There are no inspections on file as of April 25, 2008.
- B. DMR Review/Excursions – There are no DMRS on file as of April 25, 2008. This is an initial permit.

8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060301 of the Vermilion-Teche Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

9. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

11. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

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Rationale for Baudin's Sausage Kitchen

1. **Outfall 001** - sausage processing wastewater (includes building and equipment washdown) and sanitary wastewater (estimated flow is 900 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (lb/day)	<u>Reference</u>
Flow (MGD)	Report : Report	40 CFR 432.52, LAG53000
BOD ₅	5.6 : 11.2	40 CFR 432.52, LAG53000
TSS	6.7 : 13.4	40 CFR 432.52, LAG53000
Oil & Grease	2.8 : 5.6	40 CFR 432.52, LAG53000
Fecal coliform Colonies/100 ml	--- : 400	LAG53000
pH	6.0 su – 9.0 su (min) (max)	40 CFR 432.52, LAG53000

Treatment: package treatment plant and oxidation pond

Monitoring Frequency: semiannually for fecal coliform, quarterly for all other parameters per BPJ and similar small facilities

Limits Justification: Limits are based on 40 CFR 432 Subpart E – Meat and Poultry Processors, Small Processors BPT and on sanitary wastewater limits established in the Class I Sanitary General Permit (LAG530000). Limits were calculated as a summation of process wastewater limits and sanitary wastewater limits (shown below) using 5500 lb/day production and 400 GPD sanitary flow (20 employees * 20 gallons/employee = 400 gpd). Additionally, while the federal guidelines do not require a fecal Coliform limit for small processors, a standard fecal limit has been included in the permit, as this discharge is composed primarily of sanitary wastewater

Calculated Mass Loading Limits for Process Water

The following mass limits are calculated from the Effluent Limitation Guidelines (ELGs) for the Meat and Poultry Products Point Source (MPPPS) Category, per 40 CFR 432.52.

Monthly Average Limits

$$\text{BOD}_5 = (5500 \text{ lbs/day}) \times (1.0 \text{ lbs/1000 lbs Finished Product [FP]}) = 5.5 \text{ lbs/day}$$

$$\text{TSS} = (5500 \text{ lbs/day}) \times (1.2 \text{ lbs/1000 lbs FP}) = 6.6 \text{ lbs/day}$$

$$\text{Oil and Grease} = (5500 \text{ lbs/day}) \times (0.5 \text{ lbs/1000 lbs FP}) = 2.75 \text{ lbs/day}$$

Daily Maximum Limits

$$\text{BOD}_5 = (5500 \text{ lbs/day}) \times (2.0 \text{ lbs/1000 lbs FP}) = 11 \text{ lbs/day}$$

$$\text{TSS} = (5500 \text{ lbs/day}) \times (2.4 \text{ lbs/1000 lbs FP}) = 13.2 \text{ lbs/day}$$

$$\text{Oil and Grease} = (5500 \text{ lbs/day}) \times (1.0 \text{ lbs/1000 lbs FP}) = 5.5 \text{ lbs/day}$$

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Sanitary Wastewater Limits per LAG530000

Sanitary limits from LAG53000 have been applied to this discharge through BPJ. The limits have been converted from mg/l to lb/day as shown below. Because the facility flow is small and primarily composed of sanitary wastewater, the entire average flow reported in the application has been used to calculate sanitary loadings.

BOD₅

Monthly Average = (30 mg/l)(0.0004 MGD)(8.34) = 0.10 lb/day

Daily Maximum = (45 mg/l)(0.0004 MGD)(8.34) = 0.15 lb/day

TSS

Monthly Average = (30 mg/l)(0.0004 MGD)(8.34) = 0.10 lb/day

Daily Maximum = (45 mg/l)(0.0004 MGD)(8.34) = 0.15 lb/day

Oil & Grease

Monthly Average = (15mg/l / 1.5)**(0.0004 MGD)(8.34) = 0.03 lb/day

Daily Maximum = (15 mg/l)(0.0004 MGD)(8.34) = 0.05 lb/day

** Monthly Average concentration limit for Oil & Grease is not included in LAG53000. A monthly average limit has been calculated as shown and has been applied through BPJ.

Summation of BOD₅, TSS, and Oil & Grease Mass Limits for Outfall 001

Since this outfall discharges commingled sanitary and process wastewater, the loadings for each wastewater type have been summed. The sanitary wastewater and process wastewater are routed through the same treatment plant. Sampling prior to commingling of treated wastewaters is not possible.

BOD₅

Monthly Average = 5.5 + 0.10 = **5.6 lb/day**

Daily Maximum = 11 + 0.15 = **11.2 lb/day**

TSS

Monthly Average = 6.6 + 0.10 = **6.7 lb/day**

Daily Maximum = 13.2 + 0.15 = **13.4 lb/day**

Oil & Grease

Monthly Average = 2.75 + 0.03 = **2.8 lb/day**

Daily Maximum = 5.5 + 0.05 = **5.6 lb/day**

BPJ Best Professional Judgement
BPT Best Practicable Control Technology Currently Available
su Standard Units
* Existing permits for similar outfalls
su Standard Units

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STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

As per LAC 33:IX.2511.B.14.a-k, storm water discharges from facilities classified as SIC code 2093 are considered to be associated with industrial activities. The facility submitted a No Exposure Certification form on February 18, 2008. Therefore a SWP3 requirement is not included in the permit.